

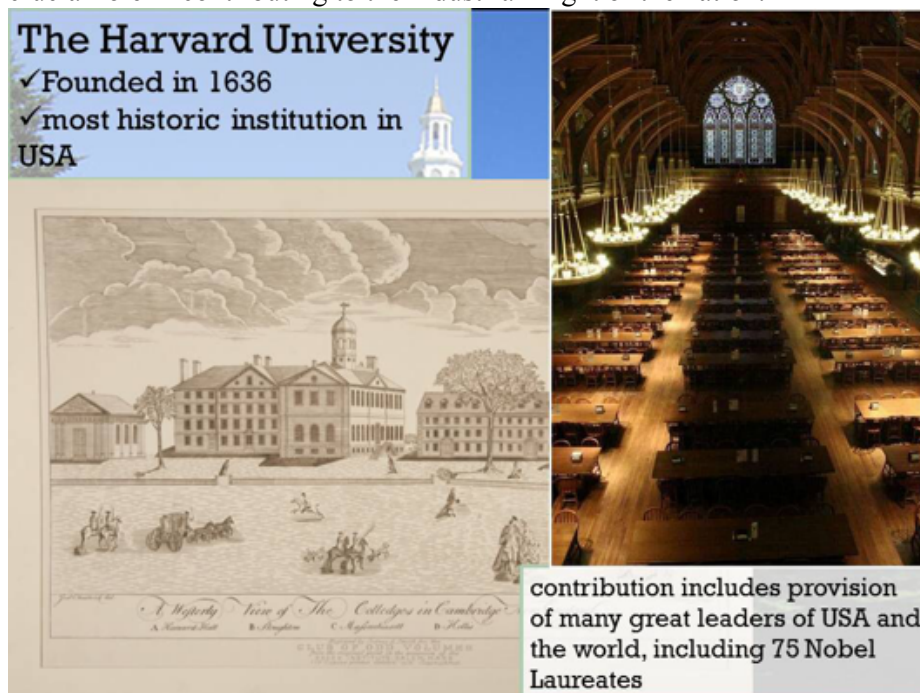
Address at the Harish C Mahindra Memorial Lecture
The Harvard University
Boston, USA
27 September 2011

“Empowering 3 Billion”

PURA is a sustainable Development System

Dear friends, I am delighted to be with the professors, academicians, researchers and students at the Harish C Mahindra Memorial Lecture organized by the South Asia Initiative at Harvard University.

Late Harish C. Mahindra, in whose memory this lecture is organized, was a distinguished alumnus of Harvard College and a visionary leader of business and industry in India. Mr. Harish Mahindra was founding chairman of the Mahindra Ugin Steel Company, and Kotak Mahindra Finance Ltd. Was also a Director of Mahindra & Mahindra Ltd. The Mahindra group of companies is one of the largest multinational conglomerates of India with revenues over US\$ 12.5 billion. He is considered amongst a visionary industrial leader, who with humility and meticulous business insight had a crucial role in contributing to the industrial might of the nation.



The Harvard University occupies a special place in the history of the United States, being founded in 1636, and thus having the unique reputation of being the most historic institution in the United States. The university with experience of 375 years with millions of students passing through Harvard University campus, in different phases of time, peace time and war time also. It makes me feel that Harvard university is a treasure house, with great teachers and great students. That itself the subject of great research, the results of which will enrich the planet earth. The Harvard University is indeed our planet based, the earth orbits around the sun in a years time, as you all know. This great Harvard University has orbited the sun 375 times, seeing observing millions of stars and planets. My hearty congratulations to the Harvard University to have such a great history. I feel highly privileged to give the Harish C Mahindra Memorial Lecture in this prestigious campus. This university is especially known for inter-disciplinary research where knowledge of 75 Nobel Laureates radiates. Apart from this, Harvard University has contributed great world leaders including the President Obama.

The topic I have selected for Harish C Mahindra Memorial Lecture is : **“Empowering 3 Billion”**. Let us first study, what are the global challenges which are faced by the nations of the world.

Global Challenges

Today, the challenges of the world are poverty, illiteracy, safe drinking water, clean and green energy, equitable distribution of resources, quality education with values for all, overcoming societal imbalances, curing diseases, quality healthcare for all and good living conditions.

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Individual nations are working to find a solution to these challenges. These challenges take various manifestation based on the local dynamics which are interconnected on various factors.

Let us look at the dynamics of these manifestations.

Dynamics of Manifestations

- The world today is integrally connected through environment, people, economy and ideas
- Global warming and climate change are no longer problems of individual nations
- economic turbulence originating in one part of the globe shook the whole world, how a volcanic eruption in an island country brought the entire airline industry and more than 5000 commercial flights to a halt

Dynamics of Global manifestations

The world today is integrally connected through four rapid connectivities. They are environment, people, economy and ideas. We all know that global warming and climate change are no longer problems of

individual nations, they are planetary problems. In the present time, a single product may be made out of components sourced from multiple continents and provide services to markets far off from their place of origin. We also saw, how the economic turbulence originating in one part of the globe shook the whole world, how a volcanic eruption in an island country brought the entire airline industry and more than 5000 commercial flights to a halt and the recent earthquake followed by tsunami has changed the concept of safety and security of an island nation. Advances in transportation have progressively made movement of people across nations and regions more feasible. This has led to the globalization of expertise and talents which can flow seamlessly from one nation to another. This also has led to the globalization of human diseases, the most recent instance being of different kinds of flu which rapidly spread across the globe and threatened the entire human kind. Similarly, ideas and innovations are no longer geographically or politically confined. An invention made today somewhere takes no time to find its market thousand of miles away. The expansion of information and communication technology and the convergence of technological tools are structuring new world knowledge, where problems of one part of the world can be solved by multiple experts based at different points of the globe. Seamless flow of information and people also means that local or regional issues will invariably gain global prominence and unaddressed problems including poverty can mutate rapidly into global terrorism which we are already witnessing.

Dynamics of Manifestations

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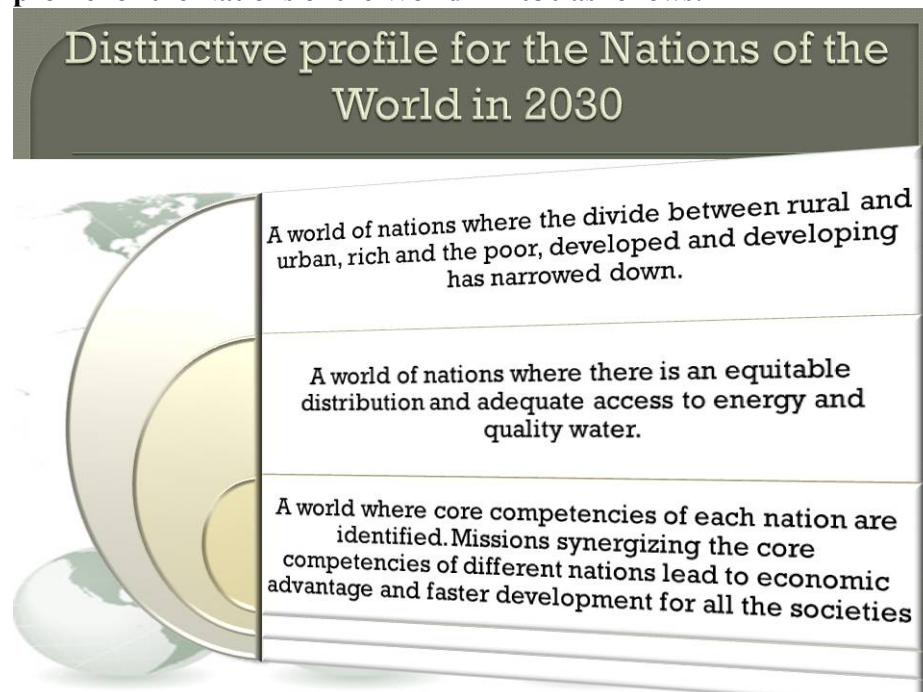
The most recent example is that of the pro-democracy movements in the Middle East which started about six months ago, starting in Tunisia, and has spread throughout the Arab world.

This flow of ideas has also led to increasing importance of global human rights and propagation of the idea of democracy. Let me recall an experience.

Globalization: When I was travelling in an aircraft in USA, I was told that much of its controls were software driven and most probably developed in India. When I presented my credit card, I was told that it was being processed in the backend server located in Mauritius. When I walked into a multinational software company in Bangalore, I was fascinated to find that it truly presented a multicultural environment. A software developer from China, working under a project leader from Korea, working with a software engineer from India and a hardware architect from the US and the communication expert from Germany, were all working together to solve the banking problem in Australia.

When I see all of them working together like one family forgetting about the culture from which they came or the language they speak, I feel that the only hope for such borderless interaction to continue is to inculcate the spirit of “borderlessness” in every human activity on our planet Earth.

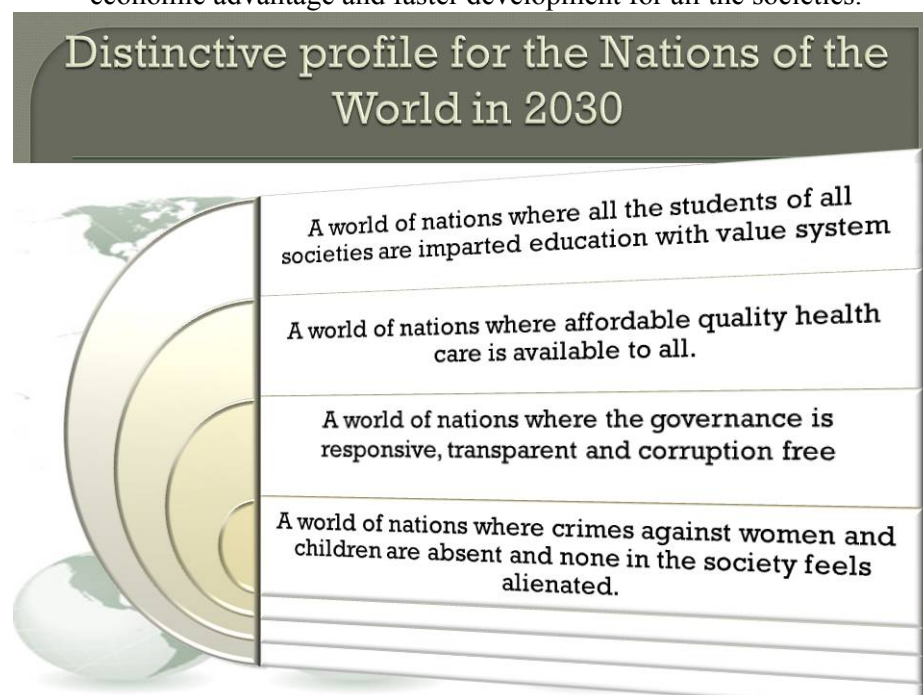
Based on some detailed discussions in many educational institutions across the world and with many citizens in India and abroad from multiple organizations, and disciplines, I am happy to present to you on **distinctive profile for the Nations of the World in 2030 as follows:**



Distinctive profile for the Nations of the World in 2030

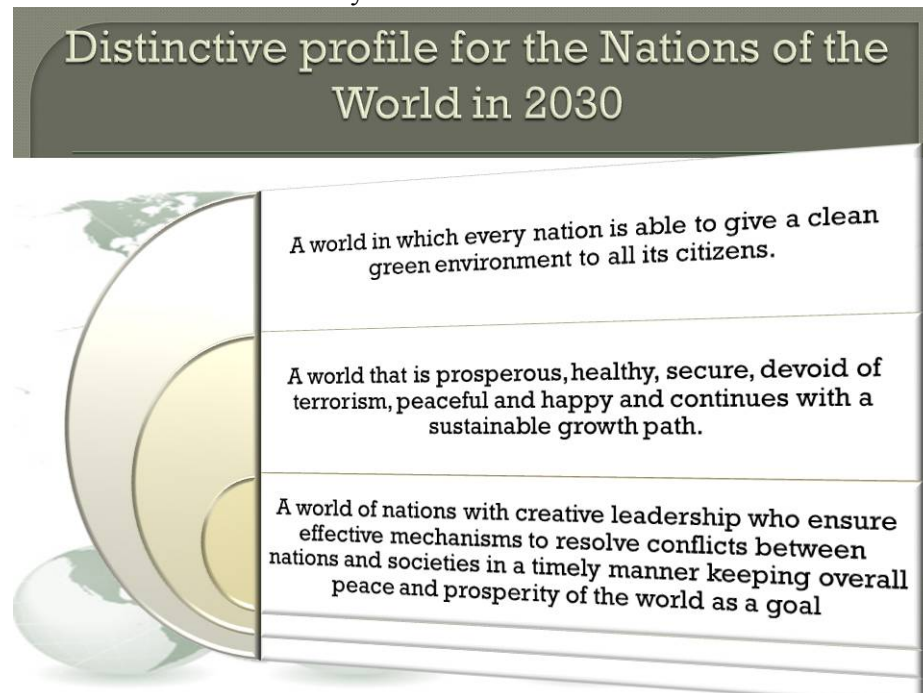
Let me present to you these visualizations.

1. A world of nations where the divide between rural and urban, rich and the poor, developed and developing has narrowed down.
2. A world of nations where there is an equitable distribution and adequate access to energy and quality water.
3. A world where core competencies of each nation are identified. Missions synergizing the core competencies of different nations lead to economic advantage and faster development for all the societies.



4. A world of nations where all the students of all societies are imparted education with value system.

5. A world of nations where affordable quality health care is available to all.
6. A world of nations where the governance is responsive, transparent and corruption free.
7. A world of nations where crimes against women and children are absent and none in the society feels alienated.



8. A world in which every nation is able to give a clean green environment to all its citizens.
9. A world that is prosperous, healthy, secure, devoid of terrorism, peaceful and happy and continues with a sustainable growth path.
10. A world of nations with creative leadership who ensure effective mechanisms to resolve conflicts between nations and societies in a timely manner keeping overall peace and prosperity of the world as a goal.

Out of box ideas needed to meet the distinctive profile of nations of the world 2030

Today, let me discuss about one of the visions in detail with all of you which is on how to reduce the rural and urban divide across the world. More than 3 Billion people live in the rural regions, and empowerment of these 3 Billion will be the basis of our discussion further. The empowerment of rural regions of the world is critically important from the perspective of inclusive development, sustained peace and shared prosperity of the world. Even the most developed nations in the world witness the rural urban divide. For instance, when I was in Kentucky USA last year, I witnessed how the rural Eastern Kentucky is still in need for societal and economic development. Of course, when it comes to the developing and underdeveloped world, the majority of the population lives in these rural areas, which necessitates a special focus on them. Bridging of the rural urban divide is closely linked with the mission of overcoming poverty and inequity.

About 70% of the world's extreme poor live in the villages and rural areas around the world. But that is not the complete picture. Driven by the need of education, healthcare and better income, the rural poverty is migrating to urban areas in a hope to get a better chance to an equitable sharing of opportunities, often meeting with despair. This forms much of the urban poverty as well.

The rural areas of the world, occupy a position where there are

unharnessed resources and potential, they have youth and traditional skills which to be nurtured into value adding enterprises leading to an environment of empowerment. How can such a mission of Empowering 3 Billion be realized? It would indeed require out of the box thinking and ideas previously un-conceived. We would need to evolve sustainable development systems which bring in sustainability and empowerment together and deliver in an entrepreneurial manner.

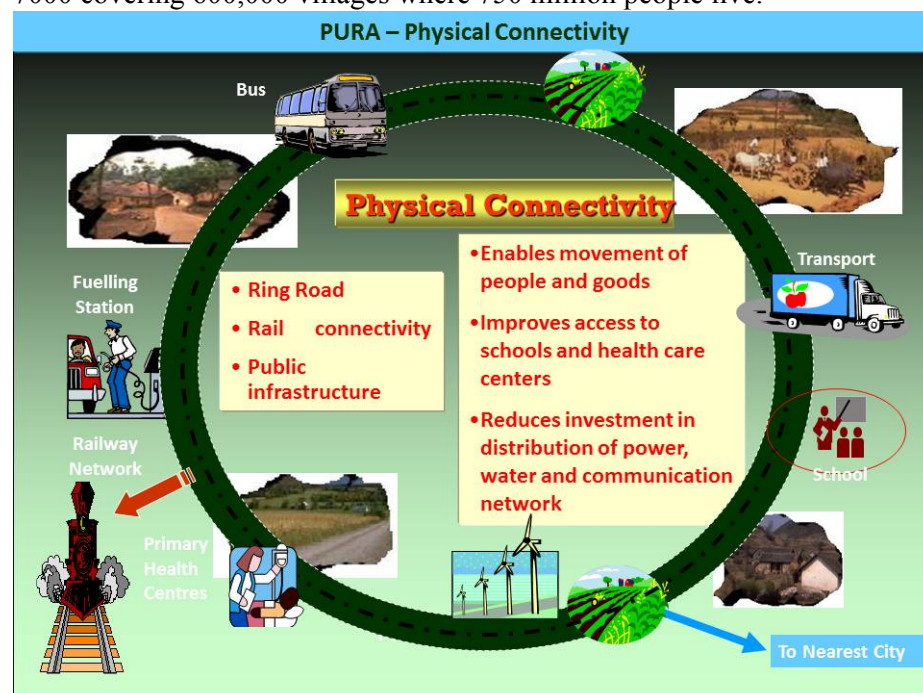
PURA Providing Urban Amenities in Rural Areas



PURA and PURA Activated

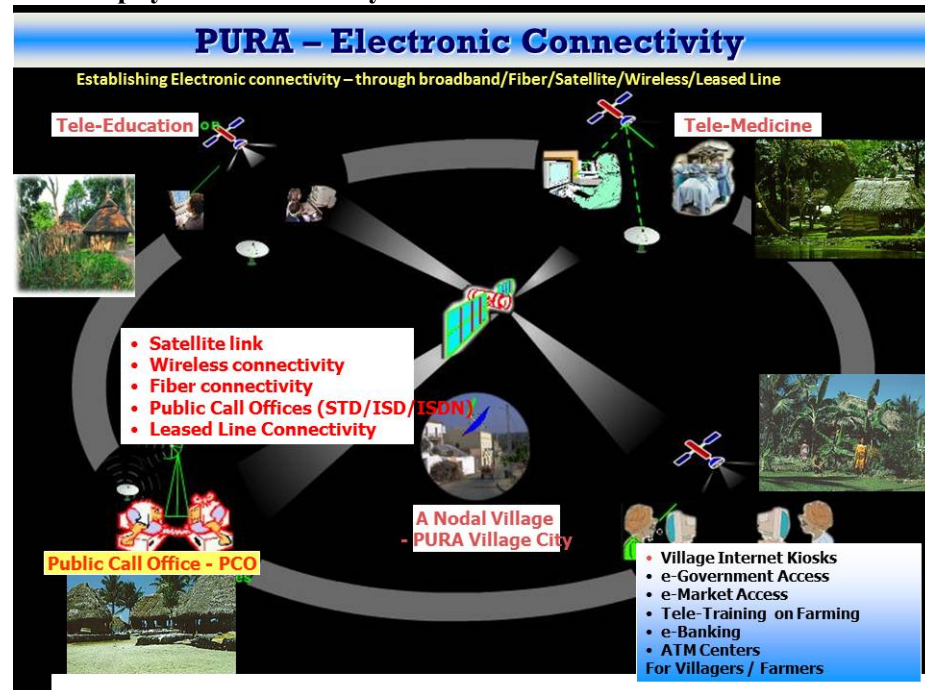
The need of the hour is the evolution of sustainable systems which act as “enablers” and bring inclusive growth and integrated development to the nations of the world.

One such sustainable development system is the mission of Provision of Urban Amenities in Rural Areas (PURA) through creation of three connectivities namely physical, electronic, knowledge leading to economic connectivity. The number of PURA for the whole country is estimated to be 7000 covering 600,000 villages where 750 million people live.



PURA means that:

1. The villages must be connected with in themselves and with main towns and metros through by good roads and wherever needed by railway lines. They must have other infrastructure like schools, colleges, hospitals and amenities for the local population and the visitors. This is **physical connectivity**.

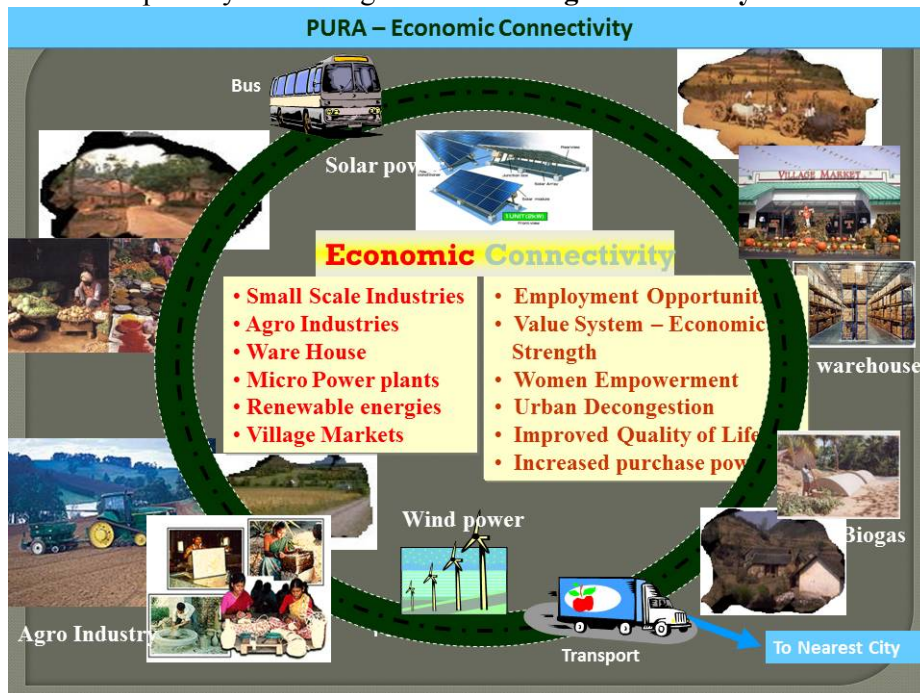


2. In the emerging knowledge era, the native knowledge has to be preserved and enhanced with latest tools of technology, training and research. The villages have to have access to good education from best teachers wherever they are, must have the benefit of good medical treatment, and must have latest information on their pursuits like agriculture, fishery, horticulture and food processing. That means they have to have **electronic connectivity**.



3. Once the Physical and Electronic connectivity are enabled, the knowledge connectivity is enabled. That can facilitate the ability increase the productivity, the utilization of spare time, awareness of health welfare, ensuring a market for products, increasing quality conscience, interacting with partners, getting the best equipment, increasing

transparency and so in general **knowledge connectivity**.



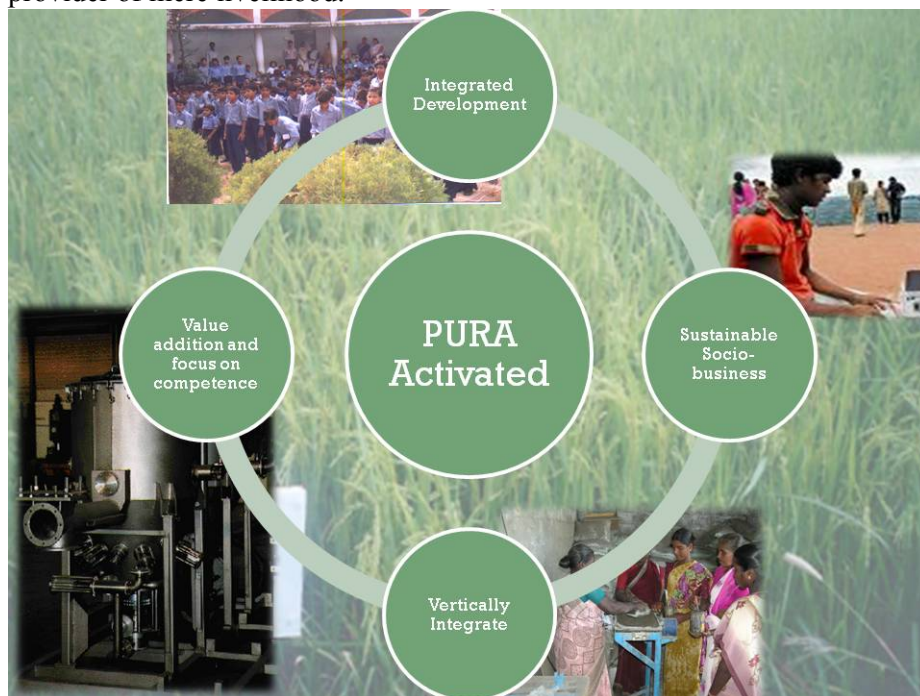
- Once the three connectivities viz Physical, Electronic and knowledge connectivity are ensured, they facilitate earning capacity leading to economic connectivity. When we Provide Urban Amenities to Rural Areas (PURA), we can lead to upliftment of rural areas, we can attract investors, we can introduce effectively useful systems like Rural BPOs, Micro Finance.

The number of PURA for the whole of India is estimated to be 7000 covering 600,000 villages where 750 million people live. Similarly, about 30,000 PURA Complexes would be required to convert the 3 billion rural population of the world into a vibrant economic zone and bringing Sustainable Development to rural areas. There are operational PURAs in India initiated by many educational, healthcare institutions, industry and other institutions. Government of India is already moving ahead with the implementation of PURA on the national scale across several districts of India.

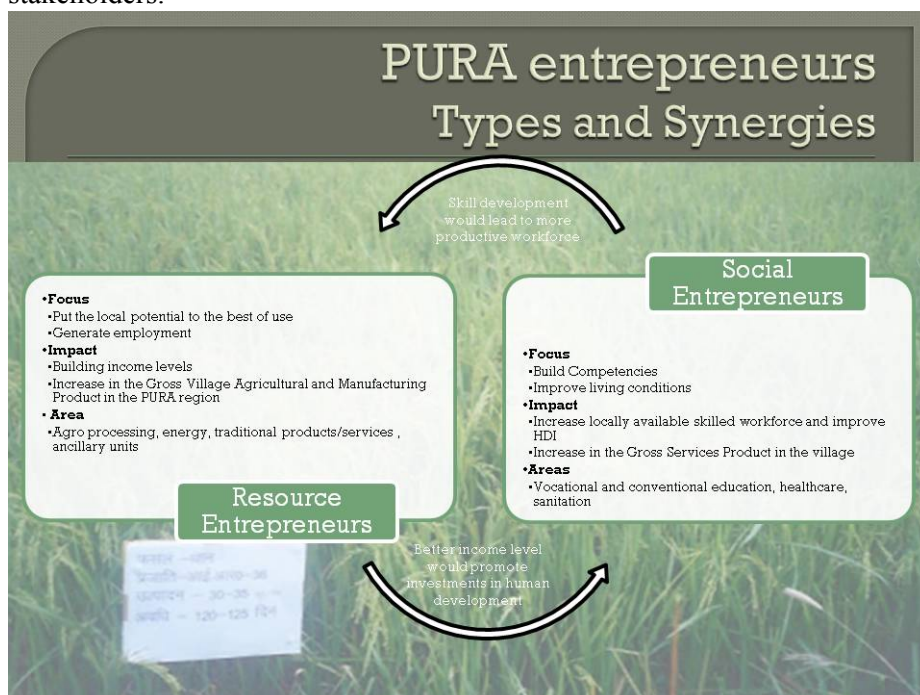


Let me present a platform which is a unique enterprise driven model of sustainable welfare model through the idea of a PURA Activated. The

essence of PURA Activated is the belief that PURA enterprises of next generation, need to think of its relationship workforce as beyond being the provider of mere livelihood.



The PURA Activated envisages in the overall, integrated development of the rural population in the PURA Complex. Moreover, it has the vision of sustainable socio-business models which are as a vertically integrated network of multiple entrepreneurs, who share synergies and provide for value addition to each other, leading to overall benefit of all the stakeholders.



The PURA Activated has two kinds of entrepreneurs –

- 1) **Resource Entrepreneurs:** They will focus on the economic realization of the natural, traditional and human resources with the help of customized technology and modern management for enhancing the income level for every household. They would be achieving the critical role of moving resources up the value chain, by application of best practices and matching product to market. Their performance will be reflected in the overall growth of the GDP of the rural complex.

- 2) **Social Entrepreneurs:** The next category of entrepreneurs, will work closely with the resource entrepreneurs. They would focus on improving the human development index, in terms of education, healthcare and improvement of standards of living by provision of amenities and equity across various diversities. These entrepreneurs will hence promote the realization purchasing power into better life and hence more skilled workforce in the area. Their performance will be objectively reflected in the enhanced literacy levels, reduced IMR/MMR/sickness, and enhanced nutrition, access to good habitation, sanitation, clean drinking water and quality energy. It will also lead to environmental consciousness and reduction and in societal conflicts.

The entrepreneurs of PURA Activated would work in close synchronization and integration with the help of local PURA champions – who may be institutions or organizations of repute. They will be partners with the government, local administration and Panchayati Raj (village governance institutions). The enterprise network of PURA Activated has to be evolved with the technical collaboration from a multi-dimensional array of technological and managerial institutions. Similarly, enterprises from different parts of the world can be partners to the PURA Activated by acting as equity investors, exploring and facilitating market linkages and providing a technological platform the best practices and innovative solutions to production challenges can strengthen the socio-economic rural complexes.

In this way, enterprises, academic institutions and business units from across the world can share their core-competencies to harness the resources of untapped rural and sub-urban regions and also lead to human development. Such collaborative platforms for 600,000 villages covering 750 million citizens in India alone, over \$200 **billion** market in India, can harness on aggregation an economy of scales leading to mutual benefits. With about the 3 billion people living in rural areas this global development system can be expanded in all the countries. Thus in this model, economic empowerment is channeled into value based social transformation.



Economic Development and Creative Leadership

Let me now discuss the linkage between national economic development and creative leadership.

- A nation's Economic development is powered by competitiveness.
- Competitiveness is powered by knowledge power.
- Knowledge power is powered by Technology and innovation.

- Technology and innovation is powered by resource investment.
- Resource investment is powered by return on Investment.
- Return on investment is powered by revenue.
- Revenue is powered by Volume and repeat sales.
- Volume and repeat sales is powered by customer loyalty.
- Customer loyalty is powered by Quality and value of products.
- Quality and value of products is powered by Employee Productivity and innovation.
- Employee Productivity is powered by Employee Loyalty.
- Employee Loyalty is powered by employee satisfaction.
- Employee satisfaction is powered by working environment.
- Working Environment is powered by management innovation.
- Management innovation is powered by Creative leadership.

For success in all the missions, it is essential to have creative leaders. Creative leadership means exercising the vision to change the traditional role from the commander to the coach, manager to mentor, from director to delegator and from one who demands respect to one who facilitates self-respect. For enhancing enterprise value, we need the large number of creative leaders.



Conclusion: Qualities of Leadership

Friends, I have seen three dreams which have taken shape as vision, mission and realization. Space Program of ISRO (Indian Space Research Organization), AGNI program of DRDO (Defense Research and Development Organization) and PURA (Providing Urban Amenities in Rural Areas) becoming the National Mission. Of course these three programmes succeeded in the midst of many challenges and problems. I have worked in all these three areas. I would like to convey to you, what I have learnt on leadership from these three programmes.

- a. Leader must have a vision.
- b. Leader must have a passion to accomplish the mission.
- c. Leader must be able to travel into an unexplored path.
- d. Leader must know how to manage a success and failure.
- e. Leader must have courage to take decision.
- f. Leader should have Nobility in management.
- g. Every action of the leader should be transparent.
- h. Leader should work with integrity and succeed with integrity.

I have been discussing these essential traits of creative leaders with people of eminence in different areas and students from India and abroad. Apart from this what is needed is the spirit among the youth that “I can do it, we can do it and the nation can do it.” Our educational institutions have to concentrate on developing the leadership traits and the confidence to perform among every youth of the nation. This quality of leadership will certainly empower the 3 billion people of the world with sustainable development as its focus.

My greetings and best wishes to all of you. May God Bless you.

Dr. APJ Abdul Kalam

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